(b) if so, the details thereof;

(c) whether any other country is using such a method; and

(d) if so, the details of the countries which are using their retired personnel to serve their Force?

THE MINISTER OF DEFENCE (SHRI GEORGE FERNANDES): (a) to (d) Indian Air Force is utilizing the services of retired officers of and below the rank of Wing Commander by re-employing them in available vacancies. As regards airmen, a Placement Cell is in position to assist retired airmen in obtaining employment with Public Sector Undertakings.

Details relating to methods used by other countries are not available with us.

WRITTEN ANSWERS TO UNSTARRED QUESTIONS

Phasing out manual jobs in underground mines

2824. SHRI ABANI ROY: Will the Minister of COAL & MINES be pleased to state:

(a) whether Coal India Limited plans to phase out manual jobs in underground mining to rise productivity through mechanisation;

(b) if so, the details thereof;

(c) whether underground coal mining through manual systems have been proved to be risky and expensive; and

(d) if so, by when underground coal mining through manual system is likely to be abolished?

THE MINISTER OF STATE IN THE MINISTRY OF COAL AND MINES (SHRI RAVI SHANKAR PRASAD): (a) and (b) Coal India is introducing mechanisation in phased manner replacing the manual system to increase production and productivity in their underground mines. Manual coal loading in many mines have been mechanized with deployment of side discharge loaders and load haul dumpers. Mechanized powered

support longwall has also been introduced in mines having suitable geo-mining conditions. Certain special methods like blasting gallery, cable bolting etc. with mechanised loading have also been introduced for extraction of thick seam.Continuous miner technology has recently been introduced. Roof bolts are being used extensively in underground m ies of CIL replacing the timber supports. Coal India Limited also has plans to extend such mechanisation in more mines in future in a phased manner.

(c) and (d) Manual underground mining requires deployment of more workers in underground. This increases the chances of number of workers being exposed to hazards of underground mining like fall, obnoxious and inflammable gases, inundation, fire etc. In manual mining, the productivity is less increasing thereby the cost of operation, especially with high wage cost. Due to adverse geo-mining conditions, presence of old workings/ standing pillars and non-availability of high production equipment indigenously, mechanisation in all underground mines is not possible at once.

Foreign Collaboration for the Development of Mines

†2825. SHRI DILIP SINGH JUDEV: Will the Minister of COAL AND MINES be pleased to state:

(a) the countries with whom agreements have been entered into for collaboration in mining works;

(b) the details thereof;

(c) the details of benefits to the country out of these agreements; and

(d) the details of cooperation in mining, India has with other countries?

THE MINISTER OF STATE IN THE MINISTRY OF COAL AND MINES (SHRI RAVI SHANKAR PRASAD): (a) to (d) The Government has not entered into any agreements with any foreign country for collaboration in mining works in the non-fuel, non-ferrous and non-atomic mineral sector. However, to facilitate bilateral cooperation in the fields of geology and mineral resources the Government signed Agreements/Memorandum of Understanding (MOU) *inter-alia* with France, South Africa, Vietnam, Mongolia and Morocco. These Agreements/MOUs envisage

†Original notice of the question was received in Hindi.